# Before the Federal Communications Commission Washington, D.C. 20554

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In the Matter of )
Federal-State Joint Board ) CC Docket No.: 96-45
Universal Service )

NOTICE OF PROPOSED RULEMAKING

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**COMMENTS FROM:** 

Illinois State Board of Education Illinois State Library Illinois Community College Board Illinois Board of Higher Education

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#### Introduction

A major thrust of the Telecommunications Act of 1996 was to ensure that advanced telecommunications services become available to K-12 classrooms, educational consortia, libraries and rural health care providers. These provisions will help open new areas of knowledge, learning and education to all Americans -- rich and poor, rural, suburban and urban. Illinois schools and libraries are among the most diverse both socio-economically and in population density. Accordingly, access and affordability of telecommunications services to these institutions varies widely

Eligible services for our learning institutions must include robust, routed, asynchronous and synchronous connections that can carry voice, data, video and images to desktop workstations. These services must be scaleable, flexible, and sustainable. These services should also be technologically diverse: able to take advantage of the latest advances in both traditional telephone, Cable, and wireless technologies. Service quality levels with regards to transmission, installation and maintenance must not differ from the same services offered to business and residential customers.

**Long-Run Marginal Costs** should define the price *ceiling* that carriers can discount from, in order to assure the services are affordable, while at the same minimizing direct subsidies from the Universal Service Support Fund.

The definition of eligible groups and resale provisions need to encourage on-going partnerships between K-12, libraries, higher education, and education-related, non-profit community groups. We cite pilot programs that encourage such collaborations. The Legislative Intent of the Act is to encourage such collaborations.

**Funding mechanisms must be diverse and sustainable**. Traditional funding may need to be enhanced through a variety of other sources, including general revenue funds from State and Federal sources; a separate levy from providers; and as has been done at the State level, direct funding of education initiatives in alternative regulatory cases.

Finally, we applaud the FCC's efforts to set national guidelines on Universal Access for educational institutions. The outcome of this process will be critical for the State-specific rules and tariffs that the Act will create. We continue to encourage market-based solutions to access and affordability issues. We look forward to the necessary debate among the participants with the goal of using advanced technology to better educate and prepare our citizens for the challenges of a constantly-changing economy

The Telecommunications Act of 1996 ("the Act") culminated years of effort to re-write the new terms of competition among participants in one of the largest, most dynamic industries in the world. The Act has set the groundwork for a restructuring of traditional relationships and the emergence of new partnerships, all while encouraging and expanding the scope of Universal Service to include educational institutions. As education and education-related institutions, the Illinois State Board of Education, the Illinois Board of Higher Education, the Illinois State Library, and the Illinois Community College Board have come together to address specific issues regarding Universal Service and educational institutions.

We agree with the Act and its vision of educational institutions as one of the most important gateways for assuring that advanced telecommunications services are available, accessible and affordable to the widest number of citizens, urban, suburban or rural, without regard to socio-economic status. This mandate of "educational universal service" will be successful if the services, discounts, eligibility standards, and funding sources are structured properly. We applied the goal and look forward to seeing our schools and libraries using advanced telecommunications services to better prepare our citizens for the challenges of a global economy.

Clearly, there is a need for telecommunications services in our K-12 educational institutions. Many of our schools have limited, outdated computers, and even fewer have Internet access. This is especially true for many of our poorer urban, suburban and rural districts with a limited property tax base. A statewide survey conducted jointly

by the Lieutenant Governor's Office and the Illinois State Board of Education (ISBE) in early 1995 indicated that less than 1/3 of the K-12 school buildings and school libraries in Illinois, and less than 10% of K-12 classrooms, have access to the Internet. Clearly, there is a need for advanced telecommunications technology in our classrooms and libraries.

Our Initial Comments will concentrate on several important issues cited in the Notice of Proposed Rulemaking ("NOPR"). We believe they will define the extent to which the educational provisions of the Act will be successful. We don't believe our list to be exhaustive -- and welcome the opportunity to comment on other related issues in our Reply Comments -- but we certainly feel that these issues are critical to the Act's success. These issues include:

**Service Definition** -- What services are eligible for Universal Service designation? What service quality standards need to be in place to assure the services are delivered in a timely and consistent manner?

**Discount Methodologies** -- What is a reasonable discount? How do we best merge Universal Service with competition? Ultimately, the discount will affect how, when, and where educational institutions will use advanced services.

**Discount Eligibility** -- A narrow definition of eligible groups will seriously affect collaborations between K-12, higher education, libraries and community groups. These collaborations best fulfill the goals of the Act, making learning an on-going, life-long commitment and necessity.

**Funding Mechanisms** -- A robust, interconnected network of educational users is in the public interest. This expansion of universal service can stress the current Fund. The new initiative must not burden current universal service programs that ensure essential residential services to poor and rural areas

#### **Service Definition:**

Section 254(c) of the Act defines Universal Service as "an evolving level of telecommunications services" to be established by the FCC. The Act explicitly recognizes the importance of telecommunications services to educational institutions by establishing the principle that:

"Elementary and secondary schools and classrooms, health care providers, and libraries should have access to **advanced** telecommunications services" Section 254(b)(6) (emphasis added).

Currently, telecommunications costs in many areas of our state are prohibitive for schools and libraries. For Crawford County schools in Southeastern Illinois, access and affordability to telecommunications services pose serious problems, as educators work to develop the most basic of educational services for their schools. The District Hub in Hutsonville has one of the few ISDN lines available in all of Crawford County. A 56kb line, if available at all, costs approximately \$240 a month. A six-mile call between Hutsonville and the primary school in Robinson is considered a long-distance call, so even basic dial-up access services are prohibitively expensive. Finally, the POTS lines which currently link the schools together cannot support 28.8 kbps analog modems, making local data calls even more costly. Cable TV and wireless are, until now, not a viable option. Clearly, educational universal service means addressing situations like Crawford County.

Lbraries in our State also face similar issues. For example, the Henry C. Adams

Memorial Library in the rural western Illinois town of Prophetstown was quoted a cost of

\$850 per month for a dedicated analog line to participate in the River Bend Regional Library System Automation Program. The line would allow the smaller Adams library to tap into a regional reference database, opening up a pool of educational resources for Adams' patrons. The Adams library cannot afford the cost in its annual budget of \$25,500, and therefore could not join the program -- despite the availability of an incentive grant to pay the initial cost of equipment. In this case, telecommunications costs were a barrier to enhancing the library's ability to provide its patrons quality services.

In light of these examples, we believe discounted, modern, two-way, interactive capabilities to educational institutions -- with discounts and capabilities over and above those offered to residential customers -- are critical to the Act's success. In order to meet the needs of our schools, the definition of universal service-eligible services should include these services:

- High-speed, high-bandwidth, synchronous connections to individual school buildings and classrooms capable of carrying voice, video, and data. These services should include special pricing and discounts for educational institutions discussed herein for dedicated, point-to-point and publicly switched services, using Frame Relay or Asynchronous Transfer Modes (ATM), with bandwidth and speed ranging from 56 kbps through OC-3 (45 mbps). Examples of these services include -- but are not limited to -- ISDN (64-128 kb); T-1 (1.44 mbps); and T-3 (45 Mbps). We also believe that Cable TV and wireless connections of similar or greater bandwidth should be an integral part of the services offered under educational Universal Service tariffs. To be truly effective, these services need to be offered at the school building and classroom level, not at a regional point far removed from the classroom.
- Affordable dial-up access for off-site learning and teacher-training opportunities.
   Examples of these services include discounted ISDN and enhanced wireless services.

- Affordable telecommunications access to libraries, especially those in rural areas. We propose that services such as discounted, toll-free 800 services be made available to libraries, with special emphasis to those serving areas greater than 100 square miles.
- <u>Service quality standards</u> must be re-affirmed in the Joint Board and FCC's recommendations. Discounted services *do not* equate with sub-standard connections, outages, and maintenance standards. Schools, libraries and educational consortia are entitled to the same quality standards shared by homes and businesses.

## **Discount Methodologies**

Ultimately, educational institutions will use advanced services only to the extent they can afford to do so. Clearly, adequate funding is a national issue as educational institutions nationwide are making difficult choices with limited budgets. In many school districts, maintaining aging school infrastructure facilities strains existing school budgets. Despite tight educational budgets, school districts have begun to squeeze their budgets to begin to bring technology into their schools.

However, even within "technology" budgets, critical expenditures for teacher training, software and customer premises equipment ("CPE" -- computers, video equipment, modems, routers) make the costs of effectively using telecommunications and on-line technologies very expensive for many schools. Hence, relatively few schools have been able to take advantage of the latest technology for their students.

In light of these realities, discounts to educational institutions are only as good as the size of the discount and the "original", non-discounted price of the service. That is, a small discount over a competitively-based price may be more effective than a large discount on a heavily marked-up price.

Our recommendation is that the "ceiling" or "original" price of the services be tied to the long-run marginal cost of the service or product. Discounts should come off of this

price, not from a more heavily marked-up retail price evident in monopoly, or lightlycompetitive markets.

Our rationale is simple. A high "ceiling" price will be a boon to carriers, inciting them to publicly subsidize other services through Universal Fund monies. One likely result of that scenario is the Fund will be excessively burdened as it is asked to cover more and more contribution. Hence, we believe that any Fund mechanisms should cover discounts *for services sold below marginal costs*.

Universal Service was founded years ago on the notion that the public interest is best served by interconnection to the largest amount of citizens. We believe the premise remains true today. Per the intent of the Act, discounted educational services will continue to promote that public policy goal, and, like residential universal service, encourage citizens to use other forms of communications services. We believe educational discounts encourage citizens to use other, non-discounted services, including on-line, cable TV, and wireless services at home and in their workplaces. Carriers have -- and will continue to -- benefit from these expanding markets.

Despite the challenges of creating such a discount mechanism, Illinois (as have other states) has taken important strides to build on changes in the Law to allow for educational discounts. In its deliberations, the Joint Board should recognize recent State efforts in the area of discounted services for educational institutions. The recent passage of Illinois Senate Bill 210 (SB210) is a case in point.

SB210 allows telecommunications carriers to offer special interactive video, data, voice and electronic information learning tariffs for qualified K-12 and higher educational institutions for instruction, learning and training. SB210 provided that these services be priced no less than the long run service incremental costs of providing such services. More importantly, SB210 streamlined the process for pricing these educational offerings, including waiving imputation tests and other cost studies normally required for new service offerings. The effect of the new Law is only beginning to be felt, as telecommunications service providers have begun to offer discounted services to educational institutions, while others are discussing the prospect of doing so. We recommend that the Joint Board, FCC and State jurisdictions build on these "first step" initiatives in its own Universal Service rules.

## **Eligible Institutions**

Clearly, the intent of the Law is to assure that advanced telecommunications services reach the largest number of students and library users, offering many new opportunities to learn, regardless of location or socio-economic status. One way that the Senate and House conferees intended this to occur was their intention in Section 254(h)(5) that consortiums of educational institutions providing distance learning to elementary and secondary schools be considered an educational provider for purposes of the Act.

At the local level -- arguably the level that matters most to schools and students -- these consortia take various forms, including efforts between K-12 schools, libraries, community colleges, four-year colleges, and non-profit (501c3) community-based groups that provide collaborative, after-school and weekend education enrichment programs for students. Students from poor rural and inner-city areas stand to benefit the most from such broad-based programs, as they allow students access to advanced, on-line educational resources that are less likely to be available at home. One of our major goals is to spur such sustainable partnerships throughout Illinois.

One example of this collaboration is the Chicago Public Schools' **21st Century Community Learning Centers Project** (21st CCLC). The CCLC Project is a cluster configuration of seven high schools and thirty elementary schools, higher education, and community groups which will serve Chicago's Empowerment Zones as training centers and an interconnective information bank for students of all ages. All thirty-

seven schools will form Ed-Tech Councils of parents and community members for the purpose of addressing training, technical and school curriculum issues.

Accordingly, we believe that the Universal Service Rules on group eligibility need to include consortia like 21st CCLC to meet the goals of the Act. Including such groups in the discounted services will not subvert the letter or intent of the Law - on the contrary - it will allow the Act's education goals to be fulfilled.

Our reading of the Law, specifically Section (h)(4), clearly states that the following entities are not eligible to receive discounted rates: for profit businesses; elementary schools and secondary schools with endowments of more than \$50,000,000; and libraries that are not eligible to participate in applications for Library Services and Technology Funds. To the best of our knowledge, consortia like 21st CCLC do not fit any of these excluded categories.

Another important and related eligibility issue involves the ability of educational institutions to resell services among educational consortium members. We submit that a limited form of resell, or resource sharing, by an educational consortium should be allowed. A school or library should be allowed to recover its costs -- without profit -- of allowing an education-related, non-profit group to use telecommunications resources for additional educational or teacher-training opportunities. The ability to do so will push several important objectives including: bringing down the effective cost to the schools, allowing more economically-challenged schools to use the services; encourage

school/library/higher education/community partnerships to enhance after-school learning; and create more opportunities for staff development.

We submit that allowing such limited forms of "at-cost" reselling, or resource sharing, will enhance the goals of the Act. Such an allowance will not create subsidized telephone companies, nor will it take business away from telephone companies.

Instead, we argue that allowing such arrangements will better utilize existing resources, and create network use that would not have existed otherwise. Like many K-12 schools themselves, many education-related community groups could not afford to purchase such services on their own. Hence, these arrangements will not take away "full-cost" customers from telecommunications carriers; on the contrary, they will add use where there was none, or at best, very little.

Prohibiting consortium resource-sharing will create scenarios which, ultimately, may undermine much of the intent of the Act. Clearly, schools may stay away from the services because discounted rates remain too high and they do not have the opportunity to share the costs among other users. Other schools may be forced to buy services from re-sellers. Finally, some schools may be pushed into buying higher-priced, non-discounted services, then becoming resellers themselves. We argue that these scenarios are not what was intended by the Act.

We ask the Joint Board to consider allowing limited forms of **at-cost resource sharing** among educational consortiums for the purposes of enhancing the affordability and access of schools, students and their communities

## Funding Mechanisms

Funding mechanisms should be diverse and sustainable. That is, funding sources for educational discounts should come from a variety of sources, including the existing Universal Service Fund, as well as general revenues. However, the Joint Board -- and individual states -- should also consider other funding sources.

Among the sources include a variety of new and existing opportunities. One example is a levy from every telecommunications carrier based on market-share as is currently done with TDD (Telecommunications Devices for the Deaf) services. Another existing source includes efforts by states such as California, Indiana and Michigan which have started educational initiatives as a result of settlement arrangements from alternative regulatory settlement cases. Some states have considered using monies from fines levied as part of service quality cases and/or revenues from price cap rate reductions to spur educational efforts. All these should be considered as possible resources to fund educational universal service.

Finally, the Joint Board should recommend to municipal and local governmental bodies to explore local solutions to communications access and affordability issues. This is especially true as they examine franchising authority and right-of-way agreements.

While maintaining competitive neutrality, many municipalities have written educational access and affordability issues into their franchise arrangements with carriers.

#### Conclusion

Over the next few months, the Joint Board will be making recommendations on the scale and scope of universal service. As members of the education community in Illinois, our comments are focused around several key issues that we feel will be critical to the success of the Act in education. To be sure, our issues are not exhaustive, but we maintain that making prudent decisions on service definition, discount methodologies, eligible groups, and funding sources will be critical to the success of the Act.

The Crawford County schools, the Adams Library in Prophetstown, and Chicago's 21st CCLC Project are projects Congress had in mind when it passed the Act. These projects are also examples of the socio-economic and population diversity of Illinois' schools and libraries. Our solutions need to be just as diverse, but our goals to provide advanced services on an equitable basis to our schools, libraries and educational consortia -- regardless of income or location -- need to remain constant.

We agree with the Act that market forces and individual State actions have done much to bring technology to educational institutions. The Joint Board's recommendations need to build upon these efforts to assure that the benefits of technology reach the widest number of students, teachers and libraries per the letter and spirit of the Act. In the spirit of cooperation, we hope our comments herein assist in making those worthy

goals a reality. We welcome further comments and questions from the participants in this important task.

Respectfully Submitted,

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